MDV-V140W/DN1(C)-T2

Cooling mode: Table.1

Information requirements for air-to-air conditioners

Model(s): MDV-V140W/DN1(C);
Test matching indoor units form, Duct：2×MI2-28T2*+2×MI2-45T2*;

Outdoor side heat exchanger of air conditioner:air

Indoor side heat exchanger of air conditioner:air

Type:compressor driven

If applicable:driver of compressor:electric motor

Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	14.2	kW		Seasonal space cooling energy efficiency	$\eta_{s,c}$	221.8	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19℃（dry/wet bulb）					Declared energy efficiency ratio or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
T_j=+35℃	P_{dc}	14.206	kW		T_j=+35℃	EER_d	2.31	--
T_j=+30℃	P_{dc}	10.193	kW		T_j=+30℃	EER_d	4.3	--
T_j=+25℃	P_{dc}	6.758	kW		T_j=+25℃	EER_d	7.49	--
T_j=+20℃	P_{dc}	5.286	kW		T_j=+20℃	EER_d	12.21	--
Degradation co-efficient for air conditioners(*)	C_{dc}	0.25	—					
Power consumption in modes other than "active mode"								
Off mode	P_{OFF}	0.015	kW		Crankcase heater mode	P_{CK}	0.01	kW
Thermosat-off mode	P_{TO}	0.057	kW		Standby mode	P_{SB}	0.015	kW
Other items								
Capacity control	variable				For air-to-air air conditioner:air flow rate,outdoor measured	-	5000	m^3/h
Sound power level,outdoor	L_{WA}	71	dB					
GWP of the refrigerant		2088	kg $CO_{2\ eq}$(100years)					
Contact details								

(*)If C_{dc} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25

Where information relates to multi-split air conditioners,the test result and performance data may be obtained on the basis of performance of the outdoor unit ,with a combination of indoor unit(s) recommended by the manufacturer or importer

Heating mode: Table.2

Information requirements for heat pumps

Model(s): MDV-V140W/DN1(C);
Test matching indoor units form, Duct：2×MI2-28T2*+2×MI2-45T2*;

Outdoor side heat exchanger of air conditioner:air

Indoor side heat exchanger of air conditioner:air

Idication if the heater is equipped with a supplementary heater:no

If applicable:driver of compressor:electric motor

Parameters shall be declared for the average heating season,parameters for the warmer and colder heating seasoms are optional

Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	16.2	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	171.8	%
Declared heating capacity for part load at indoor teperature 20℃ and outdoor temperatures T_j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
T_j=-7℃°	P_{dh}	7.925	kW		T_j=-7	COP_d	2.65	--
T_j=+2℃	P_{dh}	4.804	kW		T_j=+2	COP_d	4.06	--
T_j=+7℃	P_{dh}	3.45	kW		T_j=+7	COP_d	6.02	--
T_j=+12℃	P_{dh}	3.597	kW		T_j=+12	COP_d	7.8	--
T_{biv}=bivalent temperature	P_{dh}	8.312	kW		T_{biv} =bivalent temperature	COP_d	2.65	--
T_{OL}=operation temperature	P_{dh}	7.925	kW		T_{OL} =operation temperature	COP_d	2.36	--
Bivalent temperature	T_{biv}	-7	℃					
Degradation co-efficient for heat pumps(**)	C_{dh}	0.25	—					
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P_{OFF}	0.015	kW		Back-up heating capacity(*)	elbu	0.9	kW
Thermosat-off mode	P_{TO}	0.009	kW		Type of energy input			
Crankcase heater mode	P_{CK}	0.010	kW		Standby mode	P_{SB}	0.015	kW
Other items								
Capacity control	variable				For air-to-air heat pump:air flow rate,outdoor measured	—	5000	m^3/h
Sound power level,outdoor	L_{WA}	71	dB					
GWP of the refrigerant		2088	kg $CO_{2\ eq}$(100years)					
Contact details								

(*)

(**)If C_{dh} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25

Where information relates to multi-split heat pumps,the test result and performance data may be obtained on the basis of performance of the outdoor unit ,with a combination of indoor unit(s) recommended by the manufacturer or importer

MDV-V140W/DN1(C)-Q4

Cooling mode: Table.1

Information requirements for air-to-air conditioners

Model(s): MDV-V140W/DN1(C);
Test matching indoor units form, cassette：2×MI2-28Q4*x2+2×MI2-45Q4*;

Outdoor side heat exchanger of air conditioner:air

Indoor side heat exchanger of air conditioner:air

Type:compressor driven

If applicable:driver of compressor:electric motor

Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	14.0	kW		Seasonal space cooling energy efficiency	$\eta_{s,c}$	236.6	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19℃（dry/wet bulb）					Declared energy efficiency ratio or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
T_j=+35℃	P_{dc}	13.99	kW		T_j=+35℃	EER_d	3.07	--
T_j=+30℃	P_{dc}	10.482	kW		T_j=+30℃	EER_d	5.65	--
T_j=+25℃	P_{dc}	6.783	kW		T_j=+25℃	EER_d	7.5	--
T_j=+20℃	P_{dc}	5.6	kW		T_j=+20℃	EER_d	10.01	--
Degradation co-efficient for air conditioners(*)	C_{dc}	0.25	—					
Power consumption in modes other than "active mode"								
Off mode	P_{OFF}	0.016	kW		Crankcase heater mode	P_{CK}	0.010	kW
Thermosat-off mode	P_{TO}	0.073	kW		Standby mode	P_{SB}	0.016	kW
Other items								
Capacity control	variable				For air-to-air air conditioner:air flow rate,outdoor measured	-	5000	m^3/h
Sound power level,outdoor	L_{WA}	71	dB					
GWP of the refrigerant		2088	kg $CO_{2\ eq}$(100years)					
Contact details								

(*)If C_{dc} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25

Where information relates to multi-split air conditioners,the test result and performance data may be obtained on the basis of performance of the outdoor unit ,with a combination of indoor unit(s) recommended by the manufacturer or importer

Heating mode: Table.2

Information requirements for heat pumps

Model(s): MDV-V140W/DN1(C);
Test matching indoor units form, cassette：2×MI2-28Q4*x2+2×MI2-45Q4*;

Outdoor side heat exchanger of air conditioner:air

Indoor side heat exchanger of air conditioner:air

Idication if the heater is equipped with a supplementary heater:no

If applicable:driver of compressor:electric motor

Parameters shall be declared for the average heating season,parameters for the warmer and colder heating seasoms are optional

Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	16.0	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	175.4	%
Declared heating capacity for part load at indoor teperature 20℃ and outdoor temperatures T_j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
T_j=-7℃	P_{dh}	8.158	kW		T_j=-7℃	COP_d	2.6	--
T_j=+2℃	P_{dh}	5.477	kW		T_j=+2℃	COP_d	4.34	--
T_j=+7℃	P_{dh}	3.54	kW		T_j=+7℃	COP_d	5.73	--
T_j=+12℃	P_{dh}	43.497	kW		T_j=+12℃	COP_d	8.68	--
T_{biv}=bivalent temperature	P_{dh}	8.158	kW		T_{biv} =bivalent temperature	COP_d	2.6	--
T_{OL}=operation temperature	P_{dh}	8.846	kW		T_{OL} =operation temperature	COP_d	2.6	--
Bivalent temperature	T_{biv}	-7	℃					
Degradation co-efficient for heat pumps(**)	C_{dh}	0.25	—					
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P_{OFF}	0.016	kW		Back-up heating capacity(*)	elbu	0.4	kW
Thermosat-off mode	P_{TO}	0.011	kW		Type of energy input			
Crankcase heater mode	P_{CK}	0.010	kW		Standby mode	P_{SB}	0.016	kW
Other items								
Capacity control	variable				For air-to-air heat pump:air flow rate,outdoor measured	–	5000	m^3/h
Sound power level,outdoor	L_{WA}	71	dB					
GWP of the refrigerant		2088	kg $CO_{2\ eq}$(100years)					
Contact details								

(*)

(**)If C_{dh} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25

Where information relates to multi-split heat pumps,the test result and performance data may be obtained on the basis of performance of the outdoor unit ,with a combination of indoor unit(s) recommended by the manufacturer or importer